

IN THE CLAIMS:

Please cancel claims 1-10 without prejudice or disclaimer, and substitute new Claims 11-20 therefor as follows:

Claims 1-10 (Cancelled).

11. (New) An integrated optical add/drop device having switching function for use in wavelength division multiplexing optical communication systems, comprising first and second interferometric arms of an interferometer comprising:

an optical filter having first and second input ports and first and second output ports, said first input port being connected to a first portion of said first interferometric arm, said second input port being connected to a first portion of said second interferometric arm, said first output port being connected to a second portion of said first interferometric arm, said second output port being connected to a second portion of said second interferometric arm, said optical filter acting as a selective switch exchanger for exchanging between one interferometric arm and the other at least one of a plurality of optical signals $S(\lambda_1)$, $S(\lambda_2)$, ..., $S(\lambda_n)$, received at its input ports and for transmitting the remaining optical signals through its output ports in said first and second interferometric arms; and

at least first and second optical shifters located on opposite sides of said optical filter.

12. (New) The device according to Claim 11, wherein said optical filter is a tunable optical filter.

13. (New) The device according to Claim 11, wherein each of said first and second phase shifter introduces a phase shift of $0 \pm 2\pi N$ into each optical signal $S1(\lambda_1)$, $S2(\lambda_2)$, ..., $S_n(\lambda_n)$, propagating in said first and second interferometric arms when it is in a first state.

14. (New) The device according to any one of claims 11-13, wherein each of said first and second phase shifter introduces a phase shift of $\pi/2 \pm 2\pi N$ into each optical signal $S1(\lambda_1)$, $S2(\lambda_2)$, ..., $S_n(\lambda_n)$, propagating in said first and second interferometric arms when it is in a second state.

15. (New) The device according to Claim 14, wherein each phase shifter is located in a different interferometric arm.

16. (New) The device according to Claim 15, wherein said first phase shifter is located in said first portion of said first interferometric arm and said second phase shifter is located in said second portion of said second interferometric arm.

17. (New) The device according to any one of Claims 11-13, wherein said first and second phase shifters are both located on a same one of said first and second interferometric arms.

18. (New) The device according to Claim 17, wherein said first phase shifter is located in said first portion of said first interferometric arm and said second phase shifter is located in said second portion of said first interferometric arm.

19. (New) The device according to Claim 11, wherein said interferometer is a Mach Zehnder interferometer.

20. (New) A method for adding or dropping optical signals in an integrated optical add/drop device in wavelength division multiplexing optical communications, comprising the steps of:

sending a plurality of optical signals $S(\lambda_1)$, $S(\lambda_2)$, ..., $S(\lambda_n)$, to respective first portions of first and second interferometric arms;

exchanging between one interferometric arm to the other at least one of said plurality of optical signals $S(\lambda_1)$, $S(\lambda_2)$, ..., $S(\lambda_n)$;

transmitting the remaining optical signals in respective second portions of said first and second interferometric arms; and

introducing a phase shift on at least one of said first portions and at least one of said second portions of said first and second interferometric arms for switching said integrated optical add/drop device from a first state to a second state.